

CONFERENCE OF THE EIGHTEEN-NATION COMMITTEE
ON DISARMAMENT

OF MICHIGAN

NOV 20 1968

ENDC/PV.384
25 July 1968
ENGLISH

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CONFERENCE OF THE EIGHTEEN-NATION COMMITTEE ON DISARMAMENT
FINAL VERBATIM RECORD OF THE THREE HUNDRED AND EIGHTY-FOURTH MEETING

held at the Palais des Nations, Geneva,
on Thursday, 25 July 1968, at 10.30 a.m.

Chairman: Mr. J. CASTANEDA (Mexico)

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PRESENT AT THE TABLE

Brazil:

Mr. A. da COSTA GUIMARAES

Mr. L.F.P. LAMPREIA

Mr. J. NOGUEIRA FILHO

Bulgaria:

Mr. K. CHRISTOV

Mr. B. KONSTANTINOV

Burma:

U CHIT MYAING

U KYAW MIN

Canada:

Mr. E.L.M. BURNS

Mr. A.G. CAMPBELL

Mr. J.R. MORDEN

Mr. A. BERNIER

Czechoslovakia:

Mr. T. LAHODA

Mr. R. KLEIN

Mr. J. STRUCKA

Ethiopia:

Mr. A. ZELLEKE

India:

Mr. M.A. HUSAIN

Mr. K.P. JAIN

Italy:

Mr. R. CARACCILO

Mr. G.P. TOZZOLI

Mexico:

Mr. J. CASTANEDA

Mr. H. CARDENAS RODRIGUEZ

Nigeria:

Alhaji SULE KOLO

Mr. B.O. TONWE

Poland:

Mr. H. JAROSZEK
Mr. A. SKOWRONSKI
Mr. H. STEPOSZ
Mr. S. DABROWA

Romania:

Mr. N. ECOBESCO
Mr. O. IONESCO
Mr. V. TARZIORU
Mr. C. GEORGESCO

Sweden:

Mrs. A. MYRDAL
Mr. A. EDELSTAM
Mr. U. ERICSSON
Mr. L. LUNDBERG

Union of Soviet Socialist
Republics:

Mr. A.A. ROSHCHIN
Mr. R.M. TIMERBAEV
Mr. V.V. SHUSTOV
Mr. M.P. SHELEPIN

United Arab Republic:

Mr. O. SIRRY
Mr. M. SHAKER

United Kingdom:

Mr. I.F. PORTER
Mr. W.N. HILLIER-FRY
Mr. R.I.T. GROMARTIE

United States of America:

Mr. W.C. FOSTER
Mr. G. BUNN
Mr. C. GLEYSTEN
Mr. S. GRAYBEAL

Special Representative of the
Secretary-General:

Mr. D. PROTITCH

Deputy Special Representative of the
Secretary-General:

Mr. W. EPSTEIN

1. The CHAIRMAN (Mexico) (translation from Spanish): I declare open the 384th plenary meeting of the Conference of the Eighteen-Nation Committee on Disarmament.

2. Mr. FOSTER (United States of America): Today I should like to speak briefly about nuclear explosions for peaceful purposes. We know from a variety of discussions that this is a subject of particular interest to many delegations.

3. As the Chairman of the United States Atomic Energy Commission told the Committee of our Congress considering the non-proliferation treaty (ENDC/226), the United States believes that article V of the treaty --

"... specifically commits us to take appropriate measures to make available the benefits which can be obtained from peaceful nuclear explosions."

Article V resulted from the recognition that nuclear explosive devices intended for use for peaceful purposes could be used as weapons or readily adapted for such use. Hence, to avoid a loophole, articles I and II were written to preclude the possibility of the non-nuclear-weapon parties manufacturing or acquiring nuclear explosive devices even for peaceful purposes. At the same time it was recognized as essential to provide non-nuclear-weapon parties with the firmest possible assurance that they would be able to derive the full potential benefits from the peaceful applications of nuclear explosions.

4. Article V preserves for non-nuclear-weapon parties the option to obtain peaceful nuclear explosion services from nuclear-weapon parties pursuant to bilateral agreements. But it also calls upon the parties to ensure that the benefits of such explosions can be obtained by non-nuclear parties through an appropriate international body with adequate representation of non-nuclear-weapon States. President Johnson's message of 16 July to this Committee (ENDC/228) states my Government's belief that the International Atomic Energy Agency (IAEA) should be that international body. We note that Canada, Sweden and the United Kingdom have already supported this idea.

(Mr. Foster, United States)

5. Certainly there is no need to create a new international organization. The IAEA has a wealth of relevant experience in working out specific international arrangements for the peaceful uses of atomic energy. That is an important reason for turning to the IAEA as the appropriate forum in which specific procedures should be developed for providing such services in response to requests made through the IAEA. The details of these procedures will of course be the subject of negotiations. Article V provides that these negotiations shall begin "as soon as possible after the treaty enters into force."

6. In his address to the General Assembly President Johnson made clear our intention to do what must be done to carry out our prospective commitment under article V. He said:

"... we shall continue our research and development in the use of nuclear explosions for peaceful purposes. We shall make available to the non-nuclear Treaty partners, without delay and under the treaty's provisions, the benefits of such explosions." (A/PV.1672, provisional, p.37-40)

The United States will continue to conduct within the limitations of available funds an active programme to develop nuclear explosive devices particularly suited for peaceful applications and to develop the technology of using nuclear explosions for peaceful purposes.

7. Let me emphasize that we are still in a relatively early stage of development. The Chairman of the United States Atomic Energy Commission put it this way in his statement to our Congress:

"Considerable effort is still required to apply our basic knowledge to specific commercial applications and we have much to learn about the industrialization of operations and the design of supporting equipment. Our domestic research and development programme is addressing all of these facets, but it will be several years before optimum nuclear explosive designs and the technology for all applications of nuclear explosions will be developed to the stage of commercial use. However, beginning in the near future, we hope some applications will become economically attractive and will be exploited even as the technology continues to develop."

(Mr. Foster, United States)

8. Continued successful development in three areas is required before nuclear explosion technology becomes an established industrial tool.

9. First, there are the nuclear explosives themselves. In this area, as the United States Atomic Energy Commission has indicated, considerable effort is still required to transform our existing knowledge of nuclear device design into nuclear explosives which are useful in a variety of industrial applications. The United States has made progress here; but more development is required to produce nuclear explosive designs which have the desired performance and characteristics. Obviously, this is an evolving technology in which improvements can be expected for many years through continuation of our research and development. However, we believe that usable, though not optimum, nuclear explosive designs for certain applications will be available in the near future. In this connexion I wish to repeat that all nuclear devices intended for use for peaceful purposes can also be used as weapons or readily adapted for such use.

10. Second, there is the needed development of a detailed understanding of the basic phenomena of underground nuclear explosions. Specifically, we must learn more of how the depth, the rock strength, the chemical properties of rock and other characteristics of the environment affect the size and shape of the crater or chimney produced. Here again we have carried out substantial research but still have much to learn.

11. Third, there is the application of the explosive devices and the effect of the resulting explosion on the underground environment to specific uses, such as stimulation of tight gas formations, construction of harbours and canals, creation of underground storage facilities, fracturing of oil shales to prepare them for retorting in-place, and the breaking of low-grade ore bodies to facilitate recovery of natural resource. The potential of these applications is very impressive.

(Mr. Foster, United States)

12. As our research and development efforts proceed, we will continue to make freely available the information and data obtained, except information relating to the design or manufacture of the nuclear explosive devices. Furthermore, we will be prepared to make arrangements whereby we will make available technical advice and assistance, within our capability, to those non-nuclear-weapon parties which seek assistance in studying specific peaceful applications of nuclear explosions. The knowledge we would gain from assisting in such studies should also permit us to take into account in our research and development programme, various applications in which other countries are interested.

13. United States domestic legislation contains clear authority to conduct research and development experiments. But in order to fulfil our obligations under article V with respect to practical applications, legislation was introduced into our Congress last week to establish the scope and conditions for the United States Atomic Energy Commission's authority to fulfil those obligations on behalf of the United States. This new legislation will provide a useful vehicle to take us through a transition period while the technology and the procedures for providing explosive services are evolving. Not only must a great deal of technical research be conducted, but we must learn much more about the administrative problems. The transition period will help us to gain the knowledge to develop standardized procedures appropriate for practical applications in handling such significant matters as security, health and safety responsibilities and indemnification.

14. While it is clearly too soon to work out the final details, I can give the Committee the broad outline of our present plans. When particular applications are found to be feasible, we plan to make a nuclear explosion service available to domestic users and to non-nuclear-weapon parties to the treaty. In addition to the nuclear explosive devices used and any technical review of the project undertaken by the United States Government, the nuclear explosion service would include the transportation of the devices from the assembly plant to the project site, their emplacement at the prepared site and their arming and firing. The users of the

(Mr. Foster, United States)

service, whether it is furnished domestically or pursuant to article V, will pay for the service in accordance with the rates established for its various elements. These rates would be no less favourable for the non-nuclear-weapon parties than for United States domestic users. As article V provides, the charges for the nuclear explosive devices used in furnishing the service will not include the cost of their research and development.

15. To be consistent with articles I and II of the treaty, arrangements must be made to ensure that the nuclear explosive devices used in furnishing such a service to non-nuclear-weapon parties remain at all times under the custody and control of the nuclear-weapon State. Thus the appropriate international observation contemplated by the treaty cannot include access by the observers to the design or internal operation of nuclear explosive devices. Consequently, there will be no transfer of nuclear explosive devices or control over them. Nor will the service in any way assist, encourage or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear explosive devices.

16. In providing a nuclear explosion service pursuant to article V, the United States must, of course, observe the requirements of the limited test-ban treaty (ENDC/100/Rev.1). Meeting these requirements will not be difficult in our research into and development of nuclear explosive devices for all peaceful applications. Nor will it be difficult for development of the technology for the application of nuclear explosions to underground engineering projects. The complete development of technology for some nuclear excavation projects cannot be carried out completely, however, within the present restrictions of the limited test-ban treaty. Modification of those restrictions would be required to permit the complete development of the technology and the execution of such projects.

17. In conclusion, let me repeat that the technology in this area is still in a relatively early stage of development. Let me urge that we agree upon the IAEA as the appropriate international organization through which non-nuclear parties may seek the benefits to be provided under article V. And we can see no reason why we

(Mr. Foster, United States)

should not confidently turn to the IAEA for the development of procedures and agreements relating to the furnishing of the peaceful explosion service to be obtained through the IAEA.

18. The CHAIRMAN (Mexico) (translation from Spanish): I should like to take this opportunity to announce, in my capacity as representative of Mexico, that my country will sign the treaty on non-proliferation tomorrow simultaneously in the three capitals of the depositary States of the treaty.

The Conference decided to issue the following communiqué

"The Conference of the Eighteen-Nation Committee on Disarmament today held its 384th plenary meeting in the Palais des Nations, Geneva, under the chairmanship of H.E. Ambassador J. Castañeda, representative of Mexico.

"Statements were made by the representatives of the United States and Mexico.

"The next meeting of the Conference will be held on Tuesday, 30 July 1968, at 10.30 a.m."

The meeting rose at 11 a.m.

